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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/872,684	06/01/2001	Shelley Cheng	NSC1-D3620	3861

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EXAMINER	
THOMPSON, MARC D	
ART UNIT	**PAPER NUMBER**
2144	

DATE MAILED: 01/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/872,684	CHENG, SHELLEY	
	Examiner	Art Unit	
	Marc D. Thompson	2144	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 October 2004* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *46-62* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *46-62* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12 July 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/25/2004 has been entered.

2. Claims 46-62 are now pending.

Priority

3. This application is a divisional of parent patent application 09/048,468, now United States Patent Number 6,496,869, issued 12/17/2002.

4. The effective filing date for the subject matter defined in the pending claims in this application is 3/26/1998.

Drawings

5. The Examiner contends that the drawings submitted on 7/12/2002 are acceptable for examination proceedings.

Double Patenting

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686

F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321© may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 46-62 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-11 of U.S. Patent No. 6,496,869. Although the conflicting claims are not identical, they are not patentably distinct from each other because the presented independent claims simply do not provide any interrupt signal(s) in the claimed invention. Neglecting this recited difference, the present claims are broader than the patented claims, and would necessarily infringe any of the previously issued claims.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 46-62 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

10. Claim 46 recites "...not a filtering operation to determine whether accept packets..." in Line 11 of the claim. The potential lacking of an article or preposition results in idiomatic English. Clarification is required. Claims 54 and 55 also share this identical deficiency in Lines 3-4 and Line 11, respectively.

11. Claim 51 recites "before asserting all of the packet to..." and "...and to assert all of the packet to..." in Lines 8-9 of the claim. It is unclear which packet of the "each packet of the incoming frame" (Line 8) is being referred to, since no individual frame has been specified. Also, see below in regard to major ambiguity in regard to "each packet of the frame".

12. Claim 53 recites the limitation "said error checking" in Line 3 of the claim. There is insufficient antecedent basis for this limitation in the claim.

13. As known in the art, frames (frame data) are defined at a "lower" "layer" than packets (packet data). This means, frames are the constituent parts of packets. Packets are not the constituent parts of frames as currently claimed. The function of MAC was exactly this, to manage access to the physical network and delimit frames in the lower two logical layers (physical and data-link of the ISO OSI networking model using frames) for subsequent delivery of information to the appropriate end station (networking address layer of ISO OSI model using packets). The claims seem replete with references to "each packet of the incoming frame" and "whether [to] accept packets of the incoming frame data". The latter of these limitations may indeed hold some weight, since the frames do constitute the packets which are formed as a result of the frame(s) reception, but the claims and the use of these limitations are indefinite due the inability to determine whether "packets" are constituent portions of frame(s) as claimed, how the

frames and packets are definitively related, and generally how the system operates to process frames and packets in accordance with the specification.

14. It is presumed that the claims do not contradict the above construct, and were meant to construe properly defining packets having constituent frames. This interpretation is hereby adopted for present examination.

Claim Rejections - 35 USC § 102

15. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

16. Claims 46-62 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Noll et al. (U.S. Patent Number 6,377,998), hereinafter referred to as Noll.

17. Noll disclosed MAC circuitry performing filtering operations on data frames. See, inter alia, Column 4, Lines 34-50. As in typical MAC circuitry at the time of invention, buffers and buffer management were implemented. See, inter alia, Column 5, Lines 1-14. In regard to programmatic ability for the MAC processor(s), Noll expressly taught the implementation of functionality in software, inter alia, in Column 5, Lines 64-67, and specifically taught a programmable MAC, inter alia, in Column 6, Lines 17-21. The filtering capabilities of the Noll system were extensive, and included a wide variety of functions unrelated to packet acceptance. See, inter alia, Column 6, Lines 1-32, Column 6, Lines 46-55, and Column 7, Lines 36-51.

18. Since all the claimed limitation as broadly set forth were disclosed by Noll, claims 46-62 are rejected.

Response to Arguments

19. The arguments presented by Applicant in the response, received 10/25/2004, are not considered persuasive.

20. The critical element of the claimed invention seems to be solely programming the MAC to perform at least one additional operation in response to incoming frame data reception which is not a filtering operation to determine whether to accept incoming packets of the frames. The breadth of this assertion is stunning, especially in light of the variety of prior art already associated with this application. This drastic shift in inventive concepts, especially in view of the breadth which the claims are presented, is hindering prosecution of this application. Applicant is suggested to provide substantial detailed functional description in the claims so an easily discernable difference between the entirety of the claimed system and invention as a whole can be established when viewed beside the prior art. Since the subject matter as set forth in the claims was well known at the time of invention, the Examiner contends that significant modification and clarification of the claims and claimed functionality occur before discussion of patentability begins. Amendments provided in the most previous response do not serve to clarify any point(s) of novelty due a major shift of underlying inventive concepts not previously presented in the claims. Applicant is once again encouraged to amend the claims, and discuss, in extreme detail, the functionality set forth in the claims, and how this functionality differs from what was known in the art and the art as currently applied.

21. It is once again noted that is it possible that Applicant is assigning some different meaning to the term "filtering" (which could force interpretation of processing at a higher level, for example, detecting command messages), but put simply, these functional features are simply

not claimed, and no discussion of this fact is provided as part of the response. Indeed, the claims recite that an "additional operation is not a filtering operation to determine...", but never specifically recites what this operation is, or what it performs. Thus, any additional operation above and beyond MAC frame acceptance is suitable for mapping precisely to the claimed invention(s) as presented and broadly argued. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

22. Applicant has had numerous opportunities to amend the claimed subject matter, and has failed to modify the claim language to distinguish over the prior art of record by clarifying or substantially narrowing the claim language and supporting any changes with substantial written discussion. Thus, Applicant apparently intends that a broad interpretation be given to the claims and the Examiner has adopted such in the present and previous Office action rejections. See *In re Prater and Wei*, 162 USPQ 541 (CCPA 1969), and MPEP § 2111. Applicant employs broad language which includes the use of words and phrases which have broad meanings in the art. Since, Applicant has not argued any narrower interpretation of the claim language nor amended the claims significantly enough to construe a narrower meaning to the limitations, and the claims breadth allows multiple interpretations and meanings which are broader than Applicant's disclosure, the Examiner is forced to interpret the claim limitations as broadly as reasonably possible, in determining patentability of the disclosed invention.

Conclusion

23. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

24. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Marc D. Thompson whose telephone number is 571-272-3932. The Examiner can normally be reached on Monday-Friday, 9am-4pm. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, William Cuchlinski, Jr. can be reached at 571-272-3925. The fax phone number for the organization where this application or proceeding is assigned remains 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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